IN THE CLAIMS

Please amend the claims as follows:

1: (currently amended) A process for reducing hot spot formation in a process for preparing chlorine by gas-phase oxidation of hydrogen chloride by means of a gas stream comprising molecular oxygen in the presence of a fixed-bed catalyst, wherein the process is carried out in a reactor having heat-exchange plates that are arranged in the longitudinal direction of the reactor and have a spacing between them and through which a heat transfer medium flows, inlet and outlet facilities for the heat transfer medium to the heat-exchange plates and also gaps between heat-exchange plates in which the fixed-bed catalyst is present and into which the hydrogen chloride and the gas stream comprising molecular oxygen are passed.

2: (previously presented) A process according to claim 1, wherein the product gas stream taken from the reactor is passed to a direct chlorination of ethylene to form 1,2-dichloroethane.

3: (previously presented) A process according to claim 1, wherein ethylene is fed as further starting material into the reactor, with 1,2-dichloroethane being obtained as desired product in the reactor.

4: (previously presented) A process according to claim 1, wherein the heat-exchange plates are arranged parallel to one another in the reactor.

5: (previously presented) A process according to claim 1, wherein the reactor is cylindrical and the heat-exchange plates are arranged radially to leave a central space and a

peripheral channel free in the cylindrical reactor and the gas stream comprising hydrogen chloride and molecular oxygen is fed into the gap between the heat exchange plates.

6: (previously presented) A process according to claim 5, wherein the radial extension of the heat-exchange plates is from 0.1 to 0.95 of the reactor radius.

7: (previously presented) A process according to claim 1, wherein the reactor is made up of two or more reactor sections.

8: (previously presented) A process according to claim 1, wherein the reactor is equipped with one or more cuboidal heat-exchange plate modules that are each made up of two or more rectangular heat-exchange plates that are arranged parallel to one another so as to leave a gap between them.

9: (previously presented) A process according to claim 8, wherein the reactor has two or more cuboidal heat-exchange plate modules, each having identical dimensions.

10: (previously presented) A process according to claim 9, wherein the reactor has 4, 7, 10 or 14 heat-exchange plate modules.

11: (previously presented) A process according to claim 1, wherein the heat-exchange plates are each made up of two rectangular metal sheets that are joined on their longitudinal sides and ends by rolled seam welding and the margin of the metal sheets projecting beyond the rolled seam is separated off at the outer edge of the rolled seam or in the rolled seam itself.

12: (previously presented) A process according to claim 8, wherein the reactor is cylindrical and an inert gas is fed into the space between the heat-exchange plate modules and the cylindrical wall of the reactor.

13: (previously presented) A process according to claim 1, wherein the fixed-bed catalyst in the gaps is arranged in zones having a differing catalytic activity.

14: (previously presented) A process according to claim 1, wherein a fixed-bed catalyst made up of particles with an equivalent particle diameter in the range from 2 to 8 mm is used.

15: (previously presented) A process according to claim 1, wherein the width of the gap is in the range from 10 to 50 mm, and the ratio of the width of the gap to the equivalent particle diameters is from 2 to 10.

16: (previously presented) A process according to claim 1, wherein the superficial velocity of the reaction gas mixture in the gaps is up to 3.0 m/s.

17: (previously presented) A process according to claim 1, wherein the reaction gas mixture and the heat transfer medium are conveyed in cocurrent through the reactor.

18: (previously presented) A process according to claim 1, wherein only a preheated inert flushing gas, in particular nitrogen, is passed through the reactor at temperatures below 150°C. during the start-up and shutdown of the reactor.

19: (previously presented) A process according to claim 5, wherein molecular oxygen is fed radially into the gap between the heat exchange plates.

20: (previously presented) A process according to claim 6, wherein the radial extension of the heat-exchange plates is from 0.3 to 0.9 of the reactor radius.